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NTC ORLANDO
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LETTER REGARDING THE REPLACEMENT OF DESTROYED WELLS AT STUDY AREA 39
NTC ORLANDO FL
12/3/1998
HARDING LAWSON ASSOCIATES

Harding Lawson Associates

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Doc. # 2530.098

December 3, 1998

Commanding Officer
SOUTHNAVFACENGCOM
2155 Eagle Drive
North Charleston, SC 29419-9010

ATTN: Ms. Barbara Nwokike, Code 187300

Subject: **Replacement of Destroyed Monitoring Wells**
Study Area 39
NTC, Orlando
Contract: N62467-89-D-0317

Dear Barbara:

As you are aware, seven monitoring wells were damaged beyond repair by the City of Orlando at Study Area (SA) 39 during recent construction activities along the utility corridor in the southwest corner of the Main Base. The destroyed monitoring wells were installed in the spring of 1997 as part of an evaluation of the contaminated groundwater discovered in the southeast corner of the site. Three of the destroyed wells (OLD-39-17A, OLD-39-18B, and OLD-39-19C) formed a cluster installed along the leading edge of the plume approximately 50 feet south of Building 137 (Figure 1). A second cluster of wells (OLD-39-20A, OLD-39-21B, and OLD-39-22C) was located approximately 100 feet west of that cluster, and was designed to confirm the lateral limits of the plume. The last of the destroyed wells was a single shallow well (OLD-39-23A) which was part of a cluster located approximately 100 feet southwest of the OLD-39-20A/OLD-39-21B/OLD-39-22C cluster. HLA recommends that these wells be abandoned in accordance with applicable regulatory guidelines.

Since these monitoring wells were to be used during future groundwater monitoring efforts at the site, HLA also recommends that all of these wells be replaced. However, in light of our current understanding of the configuration of the plume of contaminated groundwater, we are proposing that some of the wells be reinstalled at locations that would be more valuable for monitoring purposes. Monitoring well OLD-39-23A and the OLD-39-17A/OLD-39-18B/OLD-39-19C cluster can be installed at their original location. The OLD-39-20A/OLD-39-21B/OLD-39-22C cluster, however, would better serve if moved to the open field immediately east of Grace Hopper Avenue and approximately 100 feet southeast of Building 137 (Figure 1).

Additionally, HLA would recommend that an intermediate-depth well be installed approximately 50 feet northwest of the southwest corner Building 137. This is the location of the highest PCE concentration (234 $\mu\text{g/l}$) detected in the intermediate depth range (28 to 30 feet bls) during the direct push technology screening investigation and would be valuable in monitoring any changes in the chemistry and movements of the contaminant plume.

HLA estimates that the well abandonment, drilling, development, and oversight costs for the seven wells would be in the range of \$12,000 to \$15,000. The cost for the single intermediate well, assuming it is installed during the same field event, would be approximately \$1,500.

If you have any questions or need additional information, please call me at (904) 269-7012.

Very Truly Yours,

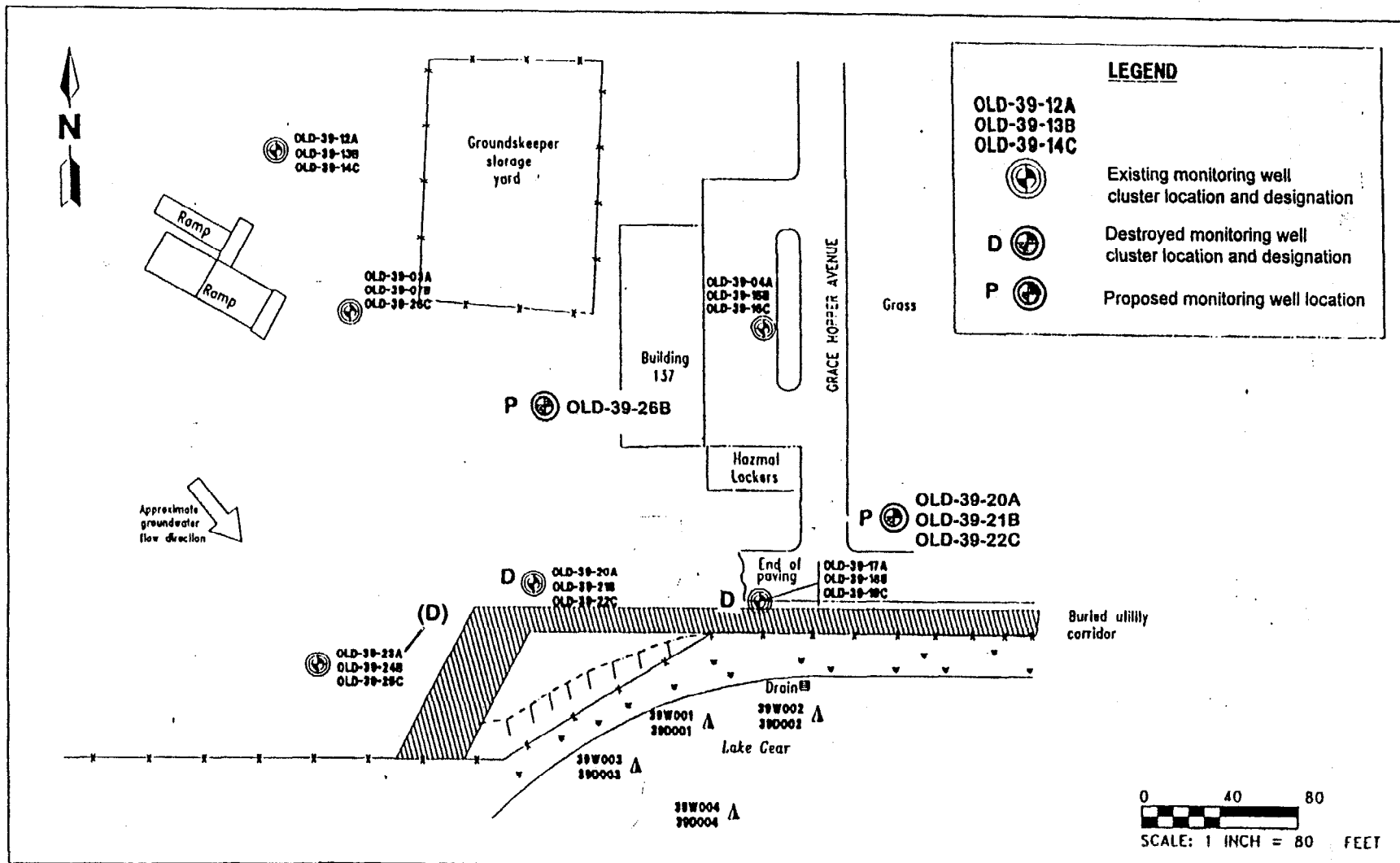
Harding Lawson Associates

Rich Allen

Richard P. Allen
Project Technical Lead

Attachment

cc: Wayne Hansel, Southern Division
Nancy Rodriguez, USEPA Region IV
David Grabka, FDEP
Lt. G. Whipple, NTC-Public Works Officer
Bob Cohose, BEI
Steve McCoy, Tetra Tech/NUS
Al Aikens, CH2M Hill
file



**FIGURE 1
PROPOSED REPLACEMENT LOCATIONS
FOR MONITORING WELL NETWORK**



**STUDY AREA 39
NAVAL TRAINING CENTER
ORLANDO, FLORIDA**